

INCH-POUND

MIL-PRF-3098/89C

27 August 1997

SUPERSEDING

MIL-C-3098/89B

5 May 1993

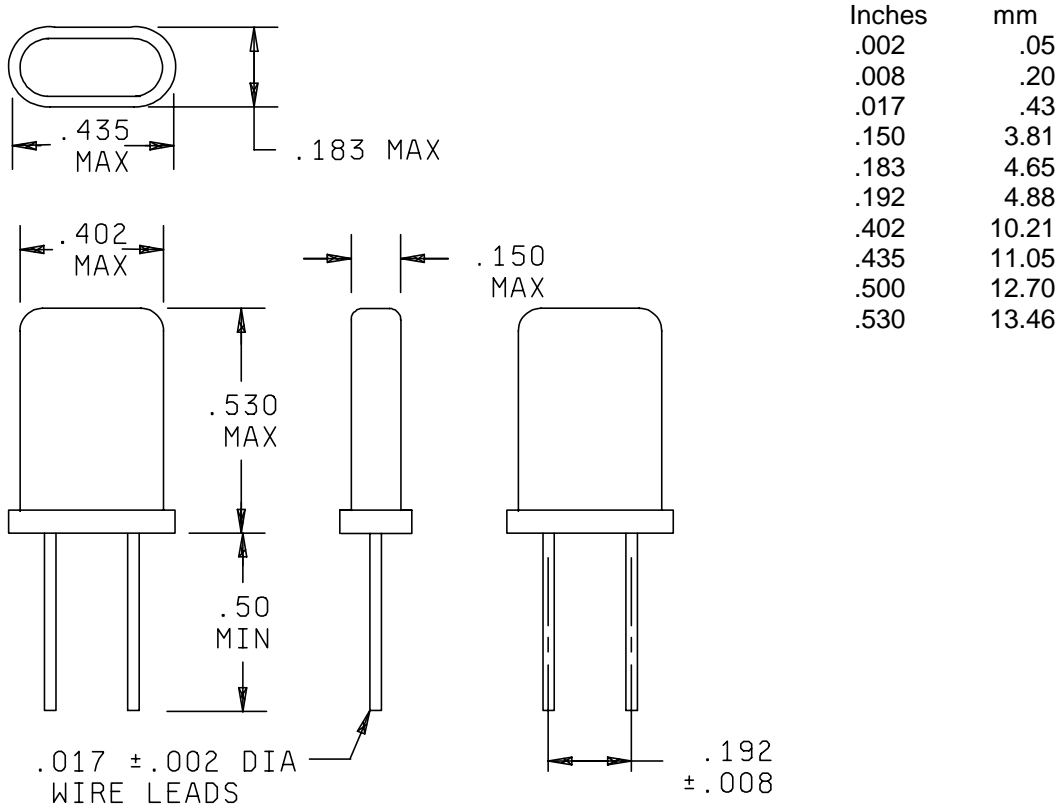
PERFORMANCE SPECIFICATION SHEET

CRYSTAL UNIT, QUARTZ, CR113/U

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-PRF-3098.

Pertinent characteristics: 10 MHz to 61 MHz; third mechanical overtone; controlled; series resonance.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Marking to be in accordance with MIL-PRF-3098.

FIGURE 1. Crystal unit - CR113/U.

REQUIREMENTS:

Dimensions, marking, and configuration: See figure 1.

Frequency range: 10 MHz to 61 MHz, inclusive.

Frequency tolerances:

Operating temperature range: ± 10 ppm.

Room temperature: ± 70 ppm.

Frequency stability: ± 2.5 ppm.

Mode of oscillation: Third mechanical overtone.

Reference temperature: $+75^{\circ}\text{C} + 1^{\circ}\text{C}$:

Temperature ranges:

Operating (controlled): $+70^{\circ}\text{C}$ to $+80^{\circ}\text{C}$, inclusive.

Operable: $+80^{\circ}\text{C}$ to $+90^{\circ}\text{C}$, inclusive.

Resonance: Series.

Rated Drive level: 1.0 mW, maximum.

Capacitance, shunt: 7 pF, maximum.

Equivalent resistance: 40 ohms, maximum.

Shock (specified pulse):

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 10 percent.

Vibration: Method 201, MIL-STD-202.

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 10 percent.

Aging:

Frequency change permitted: ± 5 ppm.

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:

Army - CR

Navy - EC

Air Force -85

Review activities:

Air Force - 17, 99

Preparing activity:

Army - CR

Agent:

DLA - CC

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